

WHAT IS CLAIMED IS:

Subb27
1. A method of designing a semiconductor circuit having clock trees, the method comprising the steps of:

generating a netlist;

5 inserting a plurality of delay gates onto said netlist;
place;

a
a
generating ~~said~~ clock trees which satisfy a constraint of
a timing in said clock ~~tree~~ ^{trees};
route;

10 manually adjusting a skew between said clock trees by
deleting some of said ~~inserted~~ ^{inserted} delay gates based on the constraint
of ~~the~~ timing between said clock trees;

examining the skew between said clock trees;

a
a
a
a
a
determining whether ~~the~~ constraint of the timing is
15 satisfied ~~or not~~; and

a
making a minimum change in ~~the~~ place and route in association
with ~~the~~ insertion of said delay gates.

2. The method of designing a semiconductor circuit according
20 to claim 1, wherein in the step of place, a plurality of delay
gates on said clock line are collectively placed.

3. The method of designing a semiconductor circuit according
to claim 1, wherein in the step of place, a plurality of delay
25 gates on said clock line are collectively placed and a large region

is assured.

4. The method of designing a semiconductor circuit according to claim 2, wherein in ^{manually} ~~the step of~~ adjusting ^{skew} between trees,

5 said delay gates at ~~the~~ first and last stages among said ~~inserted~~ ^{inserted} delay gates are not ~~regarded as~~ targets to be deleted.

5. The method of designing a semiconductor circuit according to claim 3, wherein in ^{manually} ~~the step of~~ adjusting ^{skew} between trees,

10 said delay gates at ~~the~~ first and last stages among said ~~inserted~~ ^{inserted} delay gates are not ~~regarded as~~ targets to be deleted.

6. A semiconductor circuit having clock trees, said semiconductor circuit being designed using a designing method
15 comprising the steps of:

generating a netlist;

inserting a plurality of delay gates onto said netlist;
place;

generating ~~said~~ clock trees which satisfy a constraint of
20 ^{tree} timing in said clock ~~tree~~;

route;

manually adjusting ^{skew} between said clock trees by
deleting some of said ~~inserted~~ ^{inserted} delay gates based on the constraint
of ~~the~~ timing between said clock trees;

25 examining the skew between said clock trees;

a
a
a
a
determining whether ~~the~~ constraint of the timing is
satisfied ~~or not~~; and

making a minimum change in ~~the~~ place and route in association
with ~~the~~ insertion of said delay gates.

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